The Crosby Arboretum

Mississippi State University Extension Service

Quarterly News Journal

Spring 2017

31.2

FERNS OF MISSISSIPPI

"Ferns of Mississippi" is an online resource to help with the identification of native or naturalized ferns found across Mississippi. Forester **Alan Holditch** with the Natural Resources Conservation Service – Mississippi (USDA) started the project because of his great love of ferns. Alan asked botanist **Heather Sullivan** with the Mississippi Department of Wildlife, Fisheries and Parks at the Mississippi Museum of Natural Science to collaborate on producing a field guide to the ferns of Mississippi.

While a book was the ultimate goal of their work, they decided to go forward with the website until the book was ready (**www.mississippiferns.com**). The advantage of the website is that multiple photographs can be linked to a species, where a book usually will only allow up to three photographs per species.

On the website, there is a simple online key on the **Identify Specimen** tab. By choosing the habitat type, the leaf shape, and growth form, the key produces a list of ferns that meet those characteristics. There is a "?" beside each characteristic that illustrates the different choices.

Another way to identify a fern is through the **Species List** tab. This page show photos of each species and opens to the page for individual species accounts. Fifty-nine fern species are found in Mississippi, and occupy a variety of habitats, from dry sandhills to quaking bogs.



To identify a specimen, characteristics are entered which describe the fern, for example, if it is aquatic or terrestrial, the frond shape, how they are divided, and its growth habit, i.e. climbing, clustered, creeping, solitary, etc.



Fern profiles include a state map illustrating counties where the species occurs, a habitat description, and many photos.

The **Ferns of Mississippi** website lists all fern species native or common to the state, and includes over 600 photos to help identify which fern you're looking for. By defining just a few traits about a specimen, you can easily identify ferns without knowing how to read a plant identification key. Photo search results then help you narrow your selection to the exact species.

Each fern species has a page with multiple photographs depicting the overall structure of the fern, and more focused aspects, like the sori arrangement. Additional information for each species includes: colloquial names, the family of ferns that it belongs within, the leaf and sori shapes, any special features, the habitat in which it is found and a distribution map showing all of the known locations for the species.

An **Interactive Glossary** is included to help with some of the terminology found on the website, such as fern foots, stems, fiddleheads, fronds, and sporangia. If you've ever found yourself intrigued by ferns, take a spin on this website. You'll be pleased at how quickly and easily you will be able to increase your knowledge on the subject.

Alan and Heather welcome feedback, as this helps to improve the site. They can be contacted through the website's Contact link.

Heather Sullivan



The Crosby Arboretum Mississippi State University

A regional arboretum representing the native flora of the Pearl River Drainage Basin in Mississippi and Louisiana.

Picayune, Mississippi, USA

Director's Notebook:

The year began with my trip to a long-running landscape symposium with venues in Connecticut and Pennsylvania, organized by ecological designer and landscape architect **Larry Weaner**. My presentations focused on the early guiding principles for the Arboretum's master plan developed by **Andropogon Associates**, Philadelphia, which still guide our design and management decisions today. Late January took me to the National Fish and Wildlife Foundation's Five Star & Urban Waters grant recognition ceremony in Atlanta, where I reported on our Quaking Bog educational exhibit and received the trailhead sign acknowledging the many volunteers who have participated in this project's design and construction.

In February, we welcomed a new part-time staff member, Darrell Hubert, in February, who assists Terry Johnson with site maintenance tasks. Darrell has already been a great help with several prescribed fires! The Quaking Bog educational exhibit is coming along nicely. The peat base has been laid, and the floating bridge installed, with the remainder of the boardwalk soon to be completed. The nearby Woodland Trail deck sports a fresh coat of paint, thanks to Chris Schneidau and Judy Schwartzer. We have implemented an entry wristband system for all admissions and events. This allows us to more accurately track our daily visitors. Please "pardon our dust" with ongoing improvements in the Visitor Center. Our gallery is being relocated, and we are creating a new "book nook". Come visit soon, and enjoy the roller coaster ride of our exhibits' spring blooms!

> - Patricia Drackett, Director The Crosby Arboretum, MSU Extension Service



Director Pat Drackett with Senior Environmental Specialist Patrick Chubb, Mississippi Power Company, in Atlanta at the NFWF Five Star & Urban Waters grant recognition ceremony on February 1, with the Quaking Bog Educational Exhibit trailhead plaque.



Mary Donahue and Phyllis Goodwin have been pruning and mulching in the Pollinator Garden, helping to get things in shape for spring!

CURATOR'S CORNER

Yikes! It is only the end of February, and I already have spring fever. Of course, seasons come and seasons go, but honestly, this year I only remember a few days of what I would call winter weather. The dewberries, *Rubus trivialis*, are even blooming! My mouth is watering just thinking about dewberry pie and cobbler, dewberry banana nut bread, and dewberry smoothies. Unhappily, I must wait at least a month before there will be any of these sweet delights to pop into my mouth.

In the meantime, my thoughts are turning to planting native wildflowers, shrubs and trees to support our local pollinator species such as the bees, hummingbirds and butterflies. Without these pollinators, many of our native plants as well as many of the plants of our gardens and orchards will fail to produce fruit or nuts.

The arboretum's first native plant sale of year, our Arbor Day sale, featured mainly woody plants and was a wonderful success. It is great to see so many of you wanting to put natives in your landscape. Our next sale will be held March 24-25 and will feature as many pollinator perennials and annuals as we can find. We are striving to have a wide variety of native milkweeds, coral honeysuckles, huckleberries and other plants that not only attract pollinators and wildlife but also add beauty to your landscape. If you prefer to plant seeds, our gift shop carries a wide variety. Remember a pollinator garden should include plants that support as many stages of the pollinator's life as possible. Pollinators need nectar plants for food, host plants where they can lay their eggs, and plants and structures that that provide them with protection from the elements and predators. In addition to plants, they also need sources of water and minerals. Hope to see you at the plant sale!



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Picayune, Mississippi, USA

Thank you, Annual Appeal Contributors!

The Crosby Arboretum wishes to express our sincere gratitude, and to acknowledge the persons who have made contributions to our 2016 Annual Appeal. We are pleased to report that, to date, a total of \$6,250 has been raised for the purpose of funding two summer internship positions for Mississippi State University landscape architecture and/or landscape contracting and management students. These student interns will gain valuable work experience while providing the Arboretum with critically-needed assistance. Potential projects include the design and installation of interpretative signage and plants for the Swamp Forest and Quaking Bog educational exhibits, and the organization and preservation of the Crosby Arboretum's extensive archives, which includes many photos, slides, plans, and other documents.

We are grateful that so many of you having demonstrated a strong commitment to supporting the completion of the Arboretum's educational exhibits. Your generosity allows us to continue providing visitors with new opportunities for learning about the value of our regional ecosystems while they are exploring this unique public garden.

Capt. Cornelius and Loretta S. Acheson Jerry Alexander Sherry Aycock Monte McAndrew **Peter and Jeanne Berg** Valerie Bogart **Phelan and Fay Bright Henrietta Bruggers Bruce Campbell and Ann Steinmetz Richard and Jane Clark** Claire O. Conlin Ruth Cook **Charles Cox Osmond and Deborah Crosby** Jo Ann Fleming (In memory of Joseph J. Fleming, Jr.) **Stewart and Lynn Gammill Phyllis Goodwin** Gloria F. Green **David Gurney**

Patricia Harden **Ray and Jennifer Heffner** Ann Hudnall **Chuck and Deb Kirby Dennis and Marv Martin Monte McAndrew** Kennard, Jennifer, and Sarah Crosby McKay Flovd McLamb Jimmy and Beverly Mitchell **Dick and Cindy Murchison** Julia O'Neal Jan Oreck **Gordon and Laura Ousset** John and Yvette Rosen William and Rosalie Schoell **Chris Schneidau and Judy Schwartzer** Will Sullivan William L. Thames John Villani



Volunteer **Tom Heim** and **Terry Johnson** work to install the cypress planking for the beautiful new deck located at the intersection of the **Swamp Forest Trail** and the **Slough Trail**.



Last year's annual appeal raised over \$3,000 from Crosby Arboretum members to build the handsome new deck in the **Swamp Forest Educational Exhibit**, with wrap-around seating.

PROFILE: SOUTHERN DEWBERRY

(Rubus trivialis)



Often referred to as brambles, bristles, stickers, or prickles, dewberry plants are a member of the Rose family. Here in the south, dewberries often grow in large open patches in fields, wastelands, and roadsides. Dewberries are often confused with blackberries (*Rubus cuneifolius*), however, the canes (thorny stems) of dewberries are more vine-like and sprawl along the ground, while the canes of blackberries are more rigid and upright. Also, dewberries are usually single-flowered, while blackberries have a multiple-flowered cluster. The flowers of the dewberry are usually white with a touch of pink and consist of five petals. The ripe fruit is actually an aggregate of deep purple/blackish, fleshy nutlets referred to as a berry. This tasty, spring fruit is eaten by a variety of birds, reptiles, and mammals including humans.

References: Brown, Clair A., 1972. *Wildflowers of Louisiana and Adjoining States;* Godfrey, Robert K. and Jean W. Wooten, 1981. *Aquatic and Wetland Plants of Southeastern United States-Dicotyledons.*



Terry Johnson and his volunteer crew completed the winter burn schedule on February 24 in our North Savanna. Above, Terry oversees the South Pitcher Plant Bog burn. Seventeen volunteers assisted with the burn at Hillside Bog Natural Area!

The News Journal is a quarterly publication of The Crosby Arboretum, Mississippi State University Extension Service. Journal subscriptions may be obtained with membership at the Arboretum. Printed on recycled paper with \geq 30% postconsumer waste recycled fiber. Journal may be received electronically if desired.

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Membership Application

All contributions are tax deductible to the extent allowed. For more information call: (601) 799-2311 or print form online.

 Student (send copy of student ID)		\$	15.00
 Individual			30.00
 Family			40.00
 Donor			100.00
 Patron			250.00
 Benefactor		1	,000.00
 Business			
	Sweetgum		100.00
	Sassafras		250.00
	Live Oak		500.00
	Bigleaf Magnolia	1,	000.00

Name			
Address			
City			
State	Zip	Phone	

Renewing? A Memberships are for one year.



The Crosby Arboretum

Mississippi State University P.O. Box 1639 Picayune, MS 39466-1639

Crosby Arboretum Program Schedule

March – April 2017

March 2017



A forest and wildlife biologist by training, **Robert Smith** began carrying a camera in the field thirty years ago to document the Mississippi Gulf Coast's flora, fauna, and habitats. His extensive slide file helped to illustrate his many presentations and magazine articles. Eventually, this led to fine art opportunities and the chance to lead field trips and workshops where Robert shares what he has learned with those who seek to capture the beauty of the natural world through the camera lens. Visit <u>www.photobiologist.com</u> to see Robert's work. The exhibit opening event is free to the public. Light refreshments will be served.

ATTRACTING NATIVE POLLINATORS Saturday, March 18, 10:00 to 11:00 a.m.

Learn about the types of native pollinators found in the coastal Mississippi area, how to identify them, their importance for flower and crop pollination, and simple ways to encourage them in your own garden, with Pearl River County Extension Agent **Dr. Eddie Smith**. Members free; non-members \$5. Register by March 17.



SPRING PLANT SALE!



March 24 & 25

Friday & Saturday 10 a.m. - 3 p.m.

(Members admitted at 9:00 a.m. each day)

Grab a cart and choose from a wide variety of handpicked and hard-to-find native trees, shrubs, and perennials for your landscape. Plant professionals will be on hand to help you choose plants suited to your property. **Free admission.** Sale will be held in the greenhouse area. Use site Service Entrance.

April 2017

Sunday, April 2, 1:00 to 3:00 p.m.

Bring the family and take a stroll through the Arboretum grounds, and celebrate the history of this site having a former use as a strawberry farm. The event will be held on the Pinecote Pavilion, and ice cream, fresh strawberries, and Picayune Frog Lemonade will be served. Admission is free for this community event.

WILDLIFE DAY (School field day) Thursday, April 6, 9:00 a.m. to Noon

Children will be thrilled to see the wide array of exhibitors displaying their live and preserved animals, while learning how to protect and maintain wildlife in this field day open to area K-12 schools and homeschool groups. Admission is \$2 per child, and admission is free for teachers and chaperones. **Call by April 5 to schedule an arrival time.**

SPRING FIELD WALK: FERNS & FLOWERS

Saturday, April 8, 10:00 to 11:30 a.m. Join Heather Sullivan, Mississippi Department of Wildlife, Fisheries, & Parks Botanist, for a spring walk through the Arboretum's exhibits. She will discuss ferns and flowers encountered along the journey. The program is free to members; non-members \$5. Register by April 7.

Crosby Arboretum Program Schedule

April – May 2017

April 2017 (Cont'd)

ARBORETUM SPRING FIELD WALK: CARNIVOROUS PLANTS



Saturday, April 8, 1:00 - 2:30 p.m. Join Arboretum staff members **Jennifer Buchanan** and **Pat Drackett** on this field walk to explore the carnivorous species of plants found in the Savanna Exhibit and their habitats, including sundews, bladderworts, and pitcher plants. Members free; non-members \$5. Register by April 7.

YOGA AT PINECOTE PAVILION (Earth Day!) Saturday, April 22, 10:00 to 11:30 a.m.

Join certified yoga instructor, **James Sones**, in the beautiful natural setting of Pinecote Pavilion for a gentle yoga class and short meditation sitting. Class size is limited to 16. Yoga mats will be provided, but you may bring your own. Please arrive at least 10 minutes early. Members free, \$5 non-members. Register by April 21.

PROJECT MAGNOLIA TEACHERS' WORKSHOP

Saturday, April 29, 9:00 to 3:00 p.m. Project Magnolia is a hands-on interdisciplinary workshop for K-12 teachers and homeschool educators created to increase their botanical knowledge. Backed by the NSF Magnolia GrandiFLORA grant, it will be led by Mississippi Museum of Natural Science Outreach Educator Sabrina Cummings and will provide a working knowledge of Mississippi native plants through materials, activities, and plant I.D. cards designed by Mississippi botanists to teach botany across the curriculum. All materials provided. Bring a brown bag lunch. Both the workshop and CEU's (.6) are FREE to educators. Please register for this workshop by April 26.

NATURE PHOTOGRAPHY WORKSHOP! Saturday, May 6, 9:00 a.m. to Noon

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Bring your camera! Robert Smith will begin his workshop indoors with an in-depth presentation on flower photography entitled "Flower Photography: Tricks of the Trade". The group will then move outdoors to practice some of the techniques covered. Members free, \$10 for non-members. Register by May 5.

May 2017



CHILDREN'S WORKSHOP: PAINTED POTS FOR MOTHER'S DAY

Saturday, **May 6, 1:00 to 2:00 p.m.** Children will enjoy decorating and planting a clay pot, a perfect Mother's Day Gift for moms who love plants. Children must be accompanied by parent or guardian (no charge for adults). All materials provided. Members' children \$4; nonmembers' children \$5. Register by May 5.

SHARING NATURE TEACHERS' WORKSHOP Saturday, May 13, 9:00 to 3:00 p.m.

Sharing Nature is a worldwide movement dedicated to helping children and adults deepen their relationship with nature, using creative, life-changing nature activities and Flow Learning[™], a revolutionary teaching system that fosters empathy and makes ecological principles come alive. This hands-on interdisciplinary K-12 workshop for teachers and homeschool educators will be taught by Mississippi Museum of Natural Science Outreach Educator **Sabrina Cummings.** All materials provided. Bring a brown bag lunch. The workshop and CEU's (.6) are FREE to educators. Please register by May 10.

NATIVE ORCHIDS OF SOUTH MISSISSIPPI Saturday, May 20, 10:00 to 11:30 a.m.

Learn to recognize and enjoy many of the thirty species of orchids native to the Gulf Coast! **Glen Ladnier**, long-time orchid enthusiast and member of the Gulf Coast Orchid Society, will discuss habitats, plant and flower characteristics, and touch on common conservation techniques, before leading a short field walk to visit native orchids blooming in the Arboretum exhibits. Members free; non-members \$5. Register by May 19.

Reservations: Call the Arboretum office at (601) 799-2311 for questions, and to make program reservations. **Physical Address:** 370 Ridge Road, Picayune, MS 39466 **Hours of Operation:** Wednesday-Sunday, 9:00 a.m.-5:00